REMARKS

Reconsideration and allowance are requested.

Claims 1-14, 16-25, 27, and 30 stand rejected under 35 U.S.C. §112, second paragraph for indefiniteness. This rejection is respectfully traversed.

Although one of ordinary skill in the art would have understood the meaning of the higher RLC layer being higher than the MAC layer, to facilitate prosecution claim 1 is amended to recite "receiving at a medium access control layer data units from a radio link control layer which is a higher protocol layer than the medium access control layer."

For claims 16-25 and 27, "the controller" is now referenced as "the medium access controller" to provide exact antecedent basis, though it was clear that the medium access controller was being referred to simply using "the controller."

Withdrawal of this rejection is requested.

The Examiner newly rejects claims 1, 2, 4, 9, 13-16, 18, 23, and 26-30 under 35 U.S.C. §102 for anticipation based on newly-applied Terry. This rejection is respectfully traversed.

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." *Verdegaal Bros., Inc. v. Union Oil Co.*, 814 F.2d 628, 631 (Fed. Cir. 1987). There must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. *Scripps Clinic & Research Found. v. Genentech Inc.*, 927 F.2d 1565, 1576 (Fed. Cir. 1991). Terry does not satisfy this rigorous standard.

Terry describes a medium access control (MAC) architecture to reduce transmission latency for data block retransmissions. A plurality of data blocks are received and temporarily stored in a first buffer and then transmitted. A determination is made as to whether each of the

transmitted data blocks was received successfully or needs to be retransmitted. Each transmitted data block that needs to be retransmitted is marked and temporarily stored in a second buffer having a higher priority than the first buffer. The marked data blocks are retransmitted before data blocks stored in the first buffer.

Regarding claim 1 as an example, Terry fails to disclose "analyzing at the medium access control layer some or all of a header of a radio link control data unit associated with the one data flow." The Examiner points to [0042] in Terry repeated here for convenience:

> [0042] The present invention implements a method to enable the Node B to distinguish the retransmitted PDU from other PDUs. In a first embodiment, the RNC 102 marks the retransmitted PDU by using a field of bits on its Frame Protocol (FP) overheads. The retransmitted PDU includes a CmCH-Pi which is updated (or increased) every time the PDU is sent (step 114) from the RNC 102 to the Node B 104. This permits the Node B 104 to track the number of times the PDU is sent and, therefore, identify the proper queue in which to place the PDU. Preferably, the CmCH-Pi is typically set and updated at the RNC 102. However, this function may also be performed at the Node B 104. The Node B 104 reads the CmCH-Pi and determines the proper priority queue for the PDU (steps 116). The Node B 104 transmission scheduler services the higher priority queues in advance of lower priority queues. The Node B 104 places the PDU to be retransmitted in a buffer having a higher priority than it originally had when the PDU was originally transmitted as a result of the setting of the CmCH-Pi by the RNC 102.

As Terry explains: "the RNC 102 marks the retransmitted PDU by using a field of bits on its Frame Protocol (FP) overheads." The Frame Protocol (FP) overheads are part of the MAC header not part of the RLC header as shown for example in Figure 3 of the instant application. The CmCH-Pi field in the retransmitted PDU is part of the MAC-hs data unit header. See also USPA 2008/0298323 in Figure 6 and [0049]-[0050] as well as 3GPP TS 25.425 v8.3.0 (2009-06)

at 6.2.4. The latter may be located at the following link: http://www.3gpp.org/ftp/Specs/html-info/25425.htm.

So Terry describes the MAC layer analyzing the MAC header and not the RLC header. As a result, the above-quoted claim feature is missing, and the anticipation rejection is in error.

Applicants note Terry's assumption in paragraph [0038]: "Since the MAC-d PDU contains exactly 1 RLC PDU (plus other potential MAC information), a MAC-d PDU can be considered equivalent to a RLC PDU. Although, discussion of PDUs in the CRNC or the Node B in the present application refers to MAC-d PDUs (not RLC PDUs), they can be considered equivalent for the purpose of the present invention and the term PDU will be used hereinafter to refer to both." But the fact is that the header of a MAC-d PDU is not the same as the header of to a RLC PDU. There simply is no teaching in Terry that the MAC layer looks and is aware of the substantive contents of the RLC header.

Normally, the MAC layer simply encapsulates the entire RLC data unit along with its RLC header and attaches its own MAC layer header. Terry's approach is consistent with the normal goal of the OSI and other protocol stacks which is to eliminate the need for each layer to be aware of and analyze the content of the data units received from another layer. But the inventors in this application were mindful of the PDU priority problem described in the background of this application. Although the priority levels for different types of RLC PDUs in a data flow could be signaled over the lub interface as part of the frame handling protocol, e.g., a 2-bit field indicating the PDU priority could be sent between the RNC and the Node B, this approach requires additional signaling from the RNC to the Node B. That extra signaling is avoided in the approach of claim 1 by the Node B analyzing and classifying RLC PDUs based on content in the RLC PDU header. Even though the node B normally does not contain any RLC

"awareness," that RLC awareness implemented in the Node B allows the Node B to check some or all of the existing RLC PDU header and/or RLC payload in order to make priority decisions for transmission. Terry simply does not do this.

Claims 3 and 17 stand rejected for obviousness based on Terry and Itoh. Paragraph [0225] in Itoh relates to a method for ensuring video quality by prioritizing the transmission of control packets. Figure 27 simply shows two priority level adding block 2703 and 2707 for adding a high priority level to control packets and a low priority level to data packets. An example of a method for adding priority level is to enter priority level information into the TOS field of IP packets. There is no discussion of an RLC layer or RLC header or of a MAC layer analyzing an RLC header. The Examiner should note that the determining step of claim 3 is part of the analyzing step of claim 1: "analyzing at the medium access control layer some or all of a header of a radio link control data unit associated with the one data flow." So even if Terry and Itoh could be combined for purposes of argument, that combination fails to teaching the analyzing step of claim 1 or the further determining steps of claim 3.

Although the Examiner applies several other secondary references along with Terry, none of them remedy the basic deficiencies of Terry as noted above.

The application is in condition for allowance. An early notice to that effect is solicited.

Respectfully submitted,

NIXON & VANDERHYE P.C.

By: /John R. Lastova/
John R. Lastova
Reg. No. 33,149

JRL:maa
901 North Glebe Road, 11th Floor
Arlington, VA 22203-1808
Telephone: (703) 816-4000
Facsimile: (703) 816-4100